

5                   **AVIONICS SYSTEM AND METHOD FOR**  
                  **PROVIDING ALTITUDE ALERTS DURING FINAL LANDING**  
                  **APPROACH**

**ABSTRACT OF THE DISCLOSURE**

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                  An avionics system and method is employed for alerting pilots of low premature  
                  descent during final landing approach. The method involves determining Final Approach  
                  Flight Safety Altitudes for a plurality of runways, identifying which runway an aircraft is  
                  likely to land on, and alerting the pilot if the aircraft altitude is lower than the final  
15               approach flight safety altitude. The method takes into account terrain information, airport  
                  and runway information, and aircraft reference data to make its determination. Particular  
                  embodiments reference the Final Approach Fix, one or more step down fix values, the  
                  Minimum Descent Altitude and the Missed Approach Point in calculating the Final  
                  Approach Flight Safety Altitudes. The system and method have particular utility with a  
20               Terrain Awareness and Warning System ("TAWS") and display in an aircraft.